

Appl. No. 10/013,078
Amdt. dated July 17, 2006
Reply to Office Action of April 18, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please amend claims 5 and 14, cancel claim 8 without prejudice, and add new claims 23-25 as follows.

1-4 (cancelled)

5. (currently amended): A method of detecting misappropriation of goods in a self-checkout lane in a store, the self-checkout lane having an incoming goods path and a goods collection zone, and goods being passed, in service, from the incoming goods path into the goods collection zone; the incoming goods path including a product scanner electrically coupled to a processor, and the goods collection zone including a weighing scale electrically coupled to the processor, the method being performed by a processor and comprising the steps:

- (a) receiving input from the product scanner identifying goods introduced by a customer into the incoming goods path;
- (b) controlling one or more barriers at least partially surrounding the goods collection zone so as to restrict customer access to goods collecting in the goods collection zone;
- (c) calculating, by referring to a record database of product weights, a total weight value representative of the total weight of the goods introduced into the incoming goods path;
- (d) once all the goods being checked out by a particular customer have passed onto the weighing scale, weighing the goods collectively introduced into the incoming goods path;

Appl. No. 10/013,078
Amtd. dated July 17, 2006
Reply to Office Action of April 18, 2006

~~ence collected at the goods collection zone[,] by the weighing scale and producing a total weight signal for all the goods;~~

(e) receiving input from the weighing scale specifying the total weight signal of the goods collected at the goods collection zone; and

(f) comparing the said total weight value of the goods introduced into the incoming goods path with the said total weight of the goods collected at the goods collection zone and calculating a discrepancy between the said weights; and

(g) if the calculated discrepancy exceeds a predetermined value, inhibiting conclusion of a transaction for purchase of goods introduced into the incoming goods path and collected in the goods collection zone and continuing to control the one or more barriers at least partially surrounding the goods collection zone so as to restrict access until the discrepancy is resolved and the transaction is concluded.

6. (previously presented): The method of detecting misappropriation of goods as claimed in claim 5 further comprising:

notifying store personnel if the calculated discrepancy is greater than the predetermined value.

7. (previously presented): The method of claim 5 further comprising:
operating an alarm if the calculated discrepancy is greater than the predetermined value.

8. (canceled)

9. (previously presented): The method of claim 5 wherein the weighing scale is positioned beneath the goods collection zone.

Appl. No. 10/013,078
Amdt. dated July 17, 2006
Reply to Office Action of April 18, 2006

10. (previously presented): The method of claim 9 wherein the goods collection zone further includes a conveyor.

11. (previously presented): The method of claim 9 wherein the weighing scale is shaped and sized so as to substantially fill the goods collection zone.

12. (previously presented): The method of claim 5 wherein the step of calculating a total weight value by referring to a record of product weights further comprises:

weighing loose grocery items in the incoming goods path.

13. (previously presented): The method of claim 5 further comprising: automatically retracting the one or more barriers at least partially surrounding the goods collection zone when the calculated discrepancy is less than the predetermined value and payment for the collected goods has been made.

14. (previously presented): A self-checkout lane for purchasing goods comprising:
a processor;
a database containing records of product weights;
an incoming goods path for receiving incoming goods, the incoming goods path having a scanner electrically coupled to the processor to scan the goods introduced to the incoming goods path, the processor calculating a total weight value of the scanned goods by accumulating product weights of the scanned goods stored in the database;

a goods collection zone for collecting and weighing the goods collected at the goods collection zone, the goods collection zone including a weighing scale electrically coupled to the processor to report the total weight of all the goods collected at the goods collection zone once all

Appl. No. 10/013,078
Amdt. dated July 17, 2006
Reply to Office Action of April 18, 2006

the goods being checked out by a particular customer have passed onto the weighing scale, the processor comparing the said total weight value of the scanned goods with the said total weight of the goods collected at the goods collection zone and calculating a discrepancy between the said weights; and

one or more barriers at least partially surrounding the goods collection zone, under the control of the processor, to restrict customer access to goods collected at the goods collection zone, the processor inhibiting conclusion of a transaction for purchase of goods if the calculated discrepancy exceeds a predetermined value.

15. (previously presented): The self-checkout lane of claim 14 wherein the processor notifies store personnel if the calculated discrepancy is greater than the predetermined value.

16. (previously presented): The self-checkout lane of claim 14 wherein the processor operates an alarm if the calculated discrepancy is greater than the predetermined value.

17. (previously presented): The self-checkout lane of claim 14 wherein the goods collection zone is large enough to hold a shopping cart full of items.

18. (previously presented): The self-checkout lane of claim 14 wherein the weighing scale is positioned beneath the goods collection zone.

19. (previously presented): The self-checkout lane of claim 18 wherein the goods collection zone further includes a conveyor.

20. (previously presented): The self-checkout lane of claim 18 wherein the weighing scale is shaped and sized so as to substantially fill the goods collection zone.

Appl. No. 10/013,078
Amdt. dated July 17, 2006
Reply to Office Action of April 18, 2006

21. (previously presented): The self-checkout lane of claim 14 wherein the incoming goods path includes a second weighing scale and wherein the calculated total weight value includes the weight of loose grocery items introduced to the incoming goods path.

22. (previously presented): The self-checkout lane of claim 14 wherein the processor automatically retracts the one or more barriers at least partially surrounding the goods collection zone when the calculated discrepancy is less than the predetermined value and payment for the collected goods has been made.

23. (new) The method of claim 5 wherein if the calculated discrepancy is less than the predetermined value, the transaction for purchase of goods introduced into the incoming goods path is concluded; and the method further comprises controlling the one or more barriers to allow customer access to the goods collection zone to bag the goods.

24. (new) The method of claim 23 further comprising:
operating a diverter to direct goods of a second customer to a second goods collection zone.

25. (new) A system of detecting misappropriation of goods in a self-checkout lane in a store, the self-checkout lane having an incoming goods path and a goods collection zone, and goods being passed, in service, from the incoming goods path into the goods collection zone; the incoming goods path including a product scanner electrically coupled to a processor, and the goods collection zone including a weighing scale electrically coupled to the processor, the method being performed by a processor and comprising:

Appl. No. 10/013,078
Amdt. dated July 17, 2006
Reply to Office Action of April 18, 2006

- (a) means for receiving input from the product scanner identifying goods introduced into the incoming goods path;
- (b) means for controlling one or more barriers at least partially surrounding the goods collection zone so as to restrict customer access to goods collecting in the goods collection zone ;
- (c) means for calculating, by referring to a database of product weights, a total weight value representative of the total weight of the goods introduced into the incoming goods path;
- (d) means for, once all the goods being checked out by a particular customer have passed onto the weighing scale, weighing the goods collectively at the goods collection zone and producing a total weight signal for all the goods;
- (e) means for receiving the total weight signal; and
- (f) means for comparing the total weight value of the goods introduced into the incoming goods path with the total weight of the goods collected at the goods collection zone and calculating a discrepancy between said weights; and
- (g) if the calculated discrepancy exceeds a predetermined value, means for inhibiting conclusion of a transaction for purchase of goods introduced into the incoming goods path and collected in the goods collection zone and continuing to control the one or more barriers at least partially surrounding the goods collection zone so as to restrict access until the discrepancy is resolved and the transaction is concluded.